REMOVAL ACTION WORK PLAN
for
ELGIN SALVAGE YARD – JEFFERSON AVENUE SITE
20 JEFFERSON AVENUE
ELGIN, ILLINOIS

Terracon Project No. 11077052

Prepared for the:

CITY OF ELGIN
Elgin, Illinois

Prepared by:

Terracon

135 Ambassador Drive
Naperville, Illinois 60540

May 8, 2009

TABLE OF CONTENTS

1.0 INTRODUCTION **1**
1.1 Site Background and Project Summary 1
1.2 Site Description 1

2.0 BACKGROUND **2**
2.1 Site Information 2
2.2 Drum and Cylinder Description 3
2.3 Laboratory Analysis of Selected Drummed Materials 6

3.0 PROJECT OBJECTIVE AND IMPLEMENTATION **8**
3.1 Project Objective 8
3.2 Implementation 8
3.2.1 Environmental Consultant 8
3.2.2 Remediation/Disposal Contractor 8

4.0 DRUM AND CYLINDER REMOVAL PLAN **9**
4.1 Phase I – Preliminary Evaluation and Staging 9
4.2 Phase II – Transportation and Disposal of Materials 11
4.2.1 Gas Cylinders 12
4.2.2 Oil and Water Drums 12
4.2.3 Special Waste Solids/Non-Hazardous Waste Solids and Cylinders 12
4.3 Implementation Schedule 13

5.0 REPORTING **14**

LIST OF FIGURES

Figure 1 Site Location Map
Figure 2 Site Base Map

LIST OF APPENDICES

APPENDIX A - SRP Form DRM-2
APPENDIX B - Analytical Summary Tables for Drummed Materials
APPENDIX C - SET Environmental, Inc. Houston Facility Site Profile[1]

[1] Selected Exhibits to the Facility Site Profile are omitted for brevity; these items can be provided upon request.

Terracon

May 8, 2009

Mr. Steven J. Faryan
U.S. EPA Region 5
Emergency Response Branch
On-Scene Coordinator
77 W Jackson Blvd.
Chicago, IL. 60604

RE: Elgin Salvage Yard – 20 Jefferson Avenue Site
Elgin, IL 60120
Removal Action Work Plan – Drums and Cylinders
Terracon Project No. 11077052

Dear Mr. Faryan:

On behalf of our client, the City of Elgin, we are transmitting the Removal Action Work Plan as a pdf document for the drums and cylinders at the 20 Jefferson Avenue Site in Elgin Illinois. The work plan has been prepared in response to your request.

By copy to Mr. Edward Salch of the Illinois Environmental Protection Agency (IEPA), we are submitting this Work Plan to IEPA for their information as the site is currently enrolled in the Site Remediation Program.

If you have any questions or comments regarding the plan, please feel free to contact the undersigned or Mr. Ray Moller of the City of Elgin at 847 931 6749.

Sincerely,

John M. Nardozzi, P.E.
Principal

cc: Mr. Edward Salch – Illinois Environmental Protection Agency
Ref: IEPA LPC No. 0894385681
(2 hard copies)
Mr. Raymond H. Moller – City of Elgin

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for
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1.0 INTRODUCTION

1.1 Site Background and Project Summary

This Removal Action Work Plan was prepared by Terracon Consultants, Inc. (Terracon) on behalf of the City of Elgin in conjunction with information provided by SET Environmental, Inc. (SET) to address the removal and disposal of selected drums of unknown material and gas cylinders that are present at the 20 Jefferson Avenue site in Elgin, Illinois. The United States Environmental Protection Agency (USEPA) has agreed to perform additional soil removal actions at the site in accordance with a Removal Plan prepared by Conestoga-Rovers & Associates (CRA) dated February 2009[2]. The removal actions planned by CRA are intended to achieve soil remediation in accordance with remedial objectives established by USEPA. The drums and cylinders that are the subject of this work plan are located on the concrete floor slab of the open storage shed and are in the way of the proposed USEPA clean up activity. To facilitate USEPA's plan, the City of Elgin has agreed to undertake the removal and disposal of the drums and cylinders on a voluntary basis as described herein.

1.2 Site Description

The 20 Jefferson Avenue site is located in the City of Elgin, Kane County, Illinois. The site encompasses the property bound by Jefferson Avenue to the south, the Kane County Bike Path to the west, and residential properties to the north and east of the site. A site location map is provided on Figure 1.

The 20 Jefferson Site is approximately 1.2 acres and is occupied by a single story shed. Approximately two-thirds of the site is open yard space that is covered with gravel. The open shed is an L-shaped, wood framed structure that has been used primarily for storage of scrap yard materials. A small office section is located in the far southeast portion of the building. The shed is currently in a state of disrepair and sections of the roof have collapsed; the office area indicates significant fire damage. The north to south oriented portion of the shed is constructed on a concrete slab foundation. The majority of the east to west oriented section of the shed has a dirt floor. Figure 2 presents a site base map showing the site in relation to surrounding properties.

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[2] Conestoga-Rovers & Associates (CRA) 2009. Removal Plan, Jefferson Yard, 20 Jefferson Avenue, Elgin, Illinois. February 2009.

2.0 BACKGROUND

2.1 Site Information

The site was historically operated by the Elgin Salvage and Supply Company as a non-ferrous scrap yard. A removal action was completed in 1995 when 2,600 cubic yards (CY) of contaminated soil was removed under the direction of USEPA. The 1995 remediation work is documented in a Removal Action Completion Report prepared by CRA and dated May 1995[3]. Following the 1995 removal action, the site continued in operation as a scrap yard until 2003 or 2004. During the later period of operation, Ericor Metals, Inc. operated the facility.

The City of Elgin acquired the site in 2004. Since the City acquired the site, no active industrial operations have been conducted on-site.

The drums and cylinders that are the subject of this work plan are believed to be scrap materials accumulated by the former site operators, Elgin Salvage and Supply Company and/or Ericor Metals. The drums and cylinders were reportedly present on-site in 2003 when Terracon conducted a Phase I Environmental Site Assessment[4] as part of the City's pre-acquisition due diligence. The Phase I ESA specifically noted:

> Terracon observed approximately 20 empty 55-gallon drums and several 55-gallon drums of unknown materials at the Jefferson Parcel portion of the site. Mr. Seldomridge [Gene Seldomridge, representative of Ericor Metals, the site operator at the time of the Phase I] was not aware of the contents of the drums. Terracon did not observe staining or evidence of leaks in the vicinity of the 55-gallon drums. Mr. Seldomridge reported that the drums (both empty and potential material containing) in this area of the site were transported to this portion of the site for storage after the CERCLIS clean-up activities were completed. The drums containing unknown materials constitute a REC [recognized environmental condition].

Although the City subsequently obtained title to the property, it is the City's position that the drums and cylinders, as described for removal and disposal herein, were and continue to remain the property of the former site operator(s).

The City of Elgin has enrolled the site into the Illinois Environmental Protection Agency's (IEPA's) Site Remediation Program (SRP) with the intent of obtaining a comprehensive

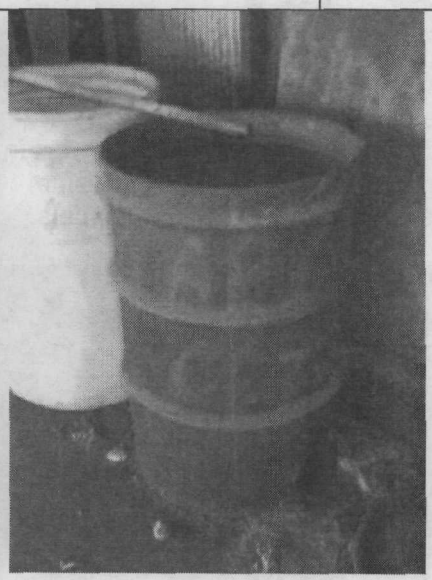
[3] Conestoga-Rovers and Associates, Removal Action Construction Report, Elgin Salvage & Supply Site. May 1, 1995.
[4] Terracon Consultants, Inc., Phase I Environmental Site Assessment, Elgin Salvage, 20 Jefferson Avenue and 464 McBride Street, Elgin, Illinois. December 23, 2003.

No Further Remediation (NFR) letter to facilitate future site redevelopment plans. The site is identified as LPC No. 0894385681. Since the site is active within the SRP, the City is submitting a copy of this Work Plan to the IEPA for their information; a copy of SRP Form DRM-2 is provided in Appendix A.

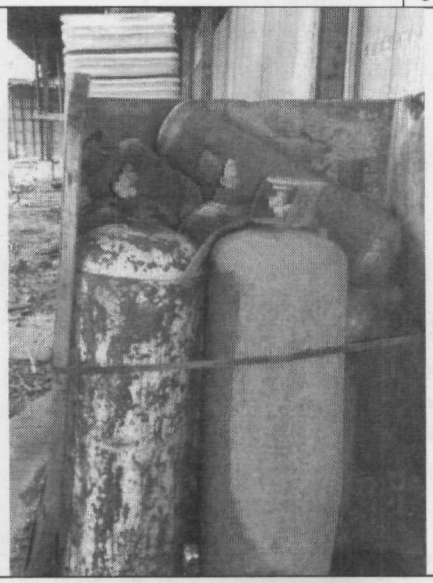
2.2 Drum and Cylinder Description

The following table summarizes the preliminary inventory of the existing on-site drums and cylinders of materials scheduled for removal under this RAP.

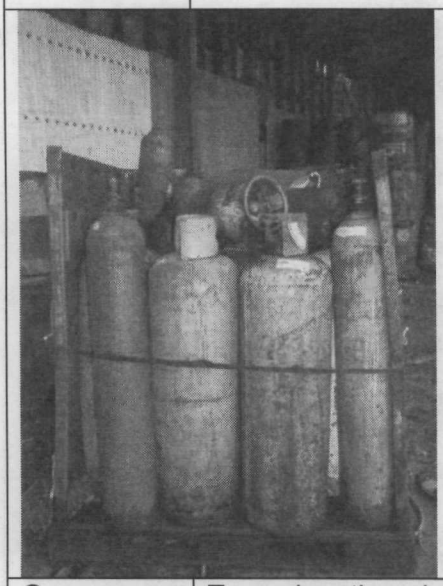
Table 1
Preliminary Inventory of Drums and Cylinders
20 Jefferson Avenue
Elgin, IL

Item	Location/Description	Qty./Material/Description
Drum Set No.1	South end of Open Shed, Drums stacked 4 rows high on concrete floor. Most drums in poor condition.	19 - 55-gal drums 2 - White sacks with dry, sand-like material. 1 - 55-gal. drum with open top, approx. ½ full of oily substance
		

Gas Cylinder Set No. 1	Gas cylinders in steel tote boxes. Variety of cylinder sizes and types. Not all cylinders could be readily observed.	4 - LPG Industrial gas cylinders 1 - Propane cylinder 4 - Oxygen cylinders



Drum Set No. 2	Central portion of open shed. Drums stacked three rows high on pallets. Many drums in poor condition without tops. White drums in foreground are apparent magnesium chips/cuttings based on drum labels.	8 - 55-gal drums with apparent magnesium chips/cuttings 43 - 55-gal drums with apparent metal slag type material

Gas Cylinder Set No. 2	Central portion of Open Shed. Cylinders contained in steel tote box. Not all cylinders could be readily observed.	16 - tall gas cylinders 3 - short gas cylinders 11 - large diameter gas cylinders Various fire extinguishers
		
Gas Cylinder Set No. 3	Toward north end of the Open Shed. One large grouping of cylinders shown, several individual cylinders scattered in area.	28 - gas cylinders 6 - fire extinguishers and multiple smaller cylinders in wire frame tote box.
		

Drum Set No. 3	North end of Open Shed.	2 – 55-gal drums (open) with steel parts/debris.
		

Notes: Drum and cylinder quantities are approximate. Where drums are stacked, the actual number of drums could not be accurately counted as some drums may be obscured. Likewise, many of the cylinders are dumped in large totes; the actual number of cylinders cannot be accurately observed. Photographs taken March 24, 2009.

2.3 Laboratory Analysis of Selected Drummed Materials

In April, 2008, USEPA commissioned further site assessment work at the 20 Jefferson site. As part of this supplemental site assessment work, USEPA's Superfund Technical Assessment and Response Team (START) and contractor, Weston Solutions, Inc. (Weston), conducted sampling of four of the on-site drums for general assessment and characterization of the on-site drummed materials. As noted in Weston's Site Assessment Report[5], four drums containing slag material, magnesium turnings, and sand were sampled for polychlorinated biphenyl (PCBs), Total Metals, Toxicity Characteristic Leaching Procedure (TCLP) Metals and Dioxins and Furans on April 24, 2008. The analytical results are summarized as follows:

- PCBs - PCBs (particularly Aroclor 1248) were noted in two of the four samples at concentrations of 68 and 97 micrograms per kilogram (ug/kg) in samples ES-DRUM -02 and ES-DRUM-03, respectively.
- Total Metals - Several metals were detected in the drum samples, including arsenic, barium, cadmium, chromium, lead, selenium and silver.
- TCLP Metals – Analysis by TCLP for the eight Resource Conservation and Recovery Act (RCRA) metals indicated concentrations below the laboratory

[5] Weston Solutions, Inc. (Weston), 2008. Site Assessment Report for The Elgin Salvage Site, Elgin, Kane County, Illinois. June 9, 2008.

reporting limit for parameters except for chromium. TCLP chromium was reported at concentrations of 0.146 and 0.154 in samples ES-DRUM-03 and ES-DRUM-04, respectively.

- Dioxins and Furans – Dioxins and furans were detected in all four drum samples at low concentrations ranging from 0.565 to 13.5 ppt TEQ.

The Site Assessment Report noted that the TCLP results did not exceed the toxicity regulatory criteria. Weston concluded that the drums of slag, magnesium trunings, ash, and other unknown materials, as well as the gas cylinders pose an imminent and substantial threat to human health and the environment. Weston recommended that all drums and gas cylinders be removed from the site.

Tables 1-3 summarizing the analytical results and excerpted from the Weston report are provided in Appendix B.

3.0 PROJECT OBJECTIVE AND IMPLEMENTATION

3.1 Project Objective

The purpose of this project is to properly and safely remove and dispose of the subject drum and cylinders materials from the site to facilitate further clean up actions at the site. In accordance with USEPA's request, the City of Elgin has agreed to undertake the removal action to facilitate and expedite the process. Per the USEPA's directive, the removal action is planned so as to comply with applicable requirements under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the National Contingency Plan. Specifically, the work proposed herein is to be carried out to meet the requirements of CERCLA related to staging, storage, transportation and disposal of the materials. In particular, the USEPA requests that the disposal facility selected for the project be in compliance with the CERCLA off-site policy.

3.2 Implementation

To comply with USEPA's directive, the City of Elgin intends to implement the removal action on a voluntary, cooperative basis using the following consultants and contractors:

3.2.1 Environmental Consultant

Terracon Consultants, Inc. (Terracon) will be retained by the City to provide environmental consulting support for the project. Terracon's responsibilities will include:

- Preparation of a Removal Action Work Plan (this document);
- Coordination with the City of Elgin, USEPA, and the Remediation/Disposal Contractor;
- Prepare a Health and Safety Plan for Terracon's on-site activities;
- Observation of the on-site remedial activities including the staging, sampling, and handling and loading of the materials; and
- Documentation of the removal action in a written report.

3.2.2 Remediation/Disposal Contractor

The City intends to enter a contract (or subcontract through the Environmental Consultant) with a remediation/disposal contractor to perform the services necessary to stage, sample, inventory, load, transport and dispose of the materials. The proposed contractor is SET Environmental, Inc. of Wheeling, Illinois (SET). SET will also be tasked with the preparation of its own health and safety plan to address the proposed on-site operations, a copy of which will be provided to USEPA.

4.0 DRUM AND CYLINDER REMOVAL PLAN

This section describes the plan that will be implemented to accomplish the project objectives. The plan is based on conducting a two phase process with respect to the drum and gas cylinder materials. Phase I entails the preliminary evaluation of the gas cylinders and drum materials so that the materials may be properly staged on-site in accordance with health and safety provisions and an accurate inventory of the materials can be obtained. During Phase I the gas cylinders will be evaluated to determine which can be safely shipped in their current condition and which may require over packing to comply with transportation requirements. Phase II of the process includes the actual shipping and disposal of the materials. Each phase of the work is described in detail below.

4.1 Phase I – Preliminary Evaluation and Staging

SET will utilize a four man crew for an initial one day duration. The crew will be comprised of a Project Manager/Field Chemist, gas cylinder specialist, technician and equipment operator. All personnel will have met and exceeded all EPA, DOT and OSHA applicable training requirements in addition to bringing experience in managing similar projects of this scale. All work will be conducted in a minimum of modified Level D PPE with increases in protection level to be made according to specific activities.

All material management activities including but not limited to: sampling, consolidation, repackaging, drum maintenance, and packaging will occur in temporary handling areas to be made of a base layer of 6-mil polysheeting and anchored/bermed with 50 lb bags of clay absorbent. A quad gas meter will be operational during all of the above activities for purposes of air monitoring. Appropriate spill control measures (liquid absorbent media, overpacks, acid/base neutralizer, and absorbent pads/boom/socks) will be accessible to temporary handling areas. The above provisions will apply to the staging area to be established for materials pending removal on the final pickup day.

SET's Field Chemist and cylinder specialist will segregate containers and cylinders into waste disposal categories depending on chemical compatibility. Field characterization testing will be utilized to determine these categories. Like and similar materials, where practical, depending on container size and physical parameters, will be consolidated into 55-gallon drums. These bulked waste classifications are expected to be: oils, non-regulated liquids, inorganic acid solution, metal fines/shavings, and non-hazardous solids. The drums generated from this procedure will be handled in accordance with their respective pricing as described in our preliminary proposal.

SET's gas cylinder specialist will be dispatched to the site to address the evaluation of the various on-site gas cylinders as described herein. The cylinder specialist will attempt to identify the contents of cylinders based on DOT numbers, labels or any other

markings on cylinders. Once identification is made, the cylinders will be properly labeled and packaged for shipping. If any cylinders are deemed "not shippable", SET will provide cylinder over packs to properly handle such cylinders. After completing Phase I SET will be able to provide information and pricing on any over packing and sampling of cylinders that need to take place.

4.1.1 Laboratory Testing of Materials

SET will obtain representative composite sample(s) of all identified unique waste streams. These samples will be submitted for a barrage of analytical procedures as necessary and consistent with the nature of the waste stream in order to identify the baseline physical and chemical characteristics that will dictate certain handling, packaging, transportation and disposal procedures vis a vis RCRA and DOT regulations. It is expected that Phase I activities will yield a minimum of four unique waste streams. The analytical procedures that will be required to complete the characterization of said waste streams are described below.

Oil and Water

Analysis for PCBs will be necessary. Specific laboratory analysis for PCBs will be performed to determine the presence of PCBs as well as their concentration in the existing oil and water mixtures. A composite sample to be comprised of a representative aliquot of each individual drum will be obtained. To prevent cross contamination, unique disposable sampling rods and PPE will be used for each drum. The composite sample will be sent to SET's contracted laboratory for priority PCB testing.

Inorganic Aqueous Solution

A single 55-gallon drum that was of a composite package configuration (plastic bladder/inner liner adhered to an outer metal drum) was observed by SET personnel during the initial site visit. This type of packaging, other waste materials onsite, and site history yield a high probability for this drum to contain an inorganic aqueous, probably acidic, metal plating or stripping solution. A representative sample of said drum will be obtained by SET personnel utilizing Level C PPE during Phase I activities. This representative composite sample will be split and submitted to two different laboratories. One sample will be submitted to a an independently owned accredited third party facility contracted by SET in order to be subjected to the toxicity characteristic leachate procedure (TCLP) to obtain the baseline physical/chemical parameters of corrosivity, reactivity, and toxicity (CRT) and numerical data on the eight RCRA regulated metals. The other sample will be submitted to SET's own internal laboratory for purposes of unknown identification analysis. Through a combination of wet chemistry and instrumental analytical techniques - a qualitative profile of the constituents comprising the sample will be revealed. Combination of the two analytical results will allow for

accurate waste stream characterization and profiling for disposal purposes compliant with regulatory requirements.

Metal Fines and Shavings

Initial site activities conducted by third parties in addition to a walkthrough performed by SET personnel indicate that probability of this particular waste stream existing and comprised primarily of magnesium turnings. Again, and as narrated above, nature of the site past use, waste material generated, etc. necessitate that the composite representative sample obtained for this waste stream be submitted to external third party laboratory for determination of status of the TCLP RCRA 8 metals. The split of the sample will be submitted to SET's internal laboratory for unknown identification analysis. This will confirm the physical matrix of magnesium and/or reveal any other constituents comprising the representative sample.

Non-hazardous Solids and Debris

This category is expected to constitute the majority of all waste materials to be removed from the site. As described above a continuous composite sample will be organically maintained throughout Phase I activities. Final representative composite sample will be split and the respective splits handled as described under "Metal Fines and Shavings".

Miscellaneous

Two unique and independent "unknown identification analyses" are also anticipated within the scope of work. As the current staging of materials does not allow for access to all drums and containers that comprise the scope of work, there remains the possibility that certain drums may be revealed during Phase I activities to contain materials that are not compatible for inclusion in any of the waste streams described above. Should it be necessary, individual representative samples of qualify material(s) will be obtained and submitted to SET's internal laboratory for unknown identification analysis as discussed earlier in the body of this document. While this contingency is not expected to be utilized, experience with past Phase I events and in consideration of the large amount of materials that will only be made accessible with the commencement of Phase I activities, a contingency for two unknown identification analyses is incorporated into this Work Plan.

4.2 Phase II – Transportation and Disposal of Materials

Subsequent to the initial one day Phase I period will be a two day onsite waste management and removal phase will occur. During this time period; all containerized wastes will be removed from the site after any necessary repackaging/container

consolidation has been completed. This phase will occur after completion of necessary laboratory analysis, all materials have been profiled and approved for receipt at their respective designated Treatment, Storage or Disposal Facility (TSDF), and SET has reviewed and obtained signature on all necessary shipping documents. This phase will occur from one to three weeks from completion of the initial site activities. SET will utilize a crew as described in Phase I (including our original Project Manager) with the addition of a driver and an 88-drum permitted trailer from its Transportation Department.

The following is a brief description of the proposed waste management activities with regard to some of the specific category(s) of materials identified on-site.

4.2.1 Gas Cylinders

The gas cylinders will be transported for delivery to SET's disposal facility in Houston, Texas. The cylinders will be disposed of properly and a letter of certification will be made available after SET processes the cylinders. A facility site profile and compliance documentation for SET's Houston gas cylinder disposal facility is provided in Appendix C.

4.2.2 Oil and Water Drums

It is anticipated that three 55-gallon drums of an "oil and water" composition will be identified on-site as drummed waste requiring disposal. Should there be a positive analytical result for PCBs, samples of the individual drums of the compromised composite sample will be submitted for PCB testing in order to isolate the source drum(s) contributing to the PCB contamination. Disposal methods will depend upon the results of the PCB analytical results.

4.2.3 Special Waste Solids/Non-Hazardous Waste Solids and Cylinders

It is anticipated that approximately fifty 55-gallon drums of material will be generated in this category. The following materials will be included, but not limited to, placement in this category: crushed empty drums, empty containers, oil filter/debris, garbage/debris, cement, silica sand, absorbent pads, metal parts/slag/debris, ice melt, drierite, refractory cement (asbestos free). A representative sample will be maintained during the generation of the category and will be submitted for characterizing analysis upon completion of initial site activities. Results of this analysis and record of materials placed into this category will be used to profile this waste stream into a local permitted Subtitle D landfill. The drums will be picked up and delivered to said facility on final pickup day.

Terracon will provide a qualified environmental professional on-site during the remedial activity to provide oversight. The environmental professional will document the field

activity and obtain copies of the laboratory analytical reports, waste disposal manifests, and certificates of destruction to properly document the completion of the work. The environmental professional will be responsible for notifying the USEPA contact in advance of all scheduled on-site work.

4.3 Implementation Schedule

The implementation of the removal actions will be initiated following notification of USEPA approval of this plan. The implementation plan and sequence is summarized below:

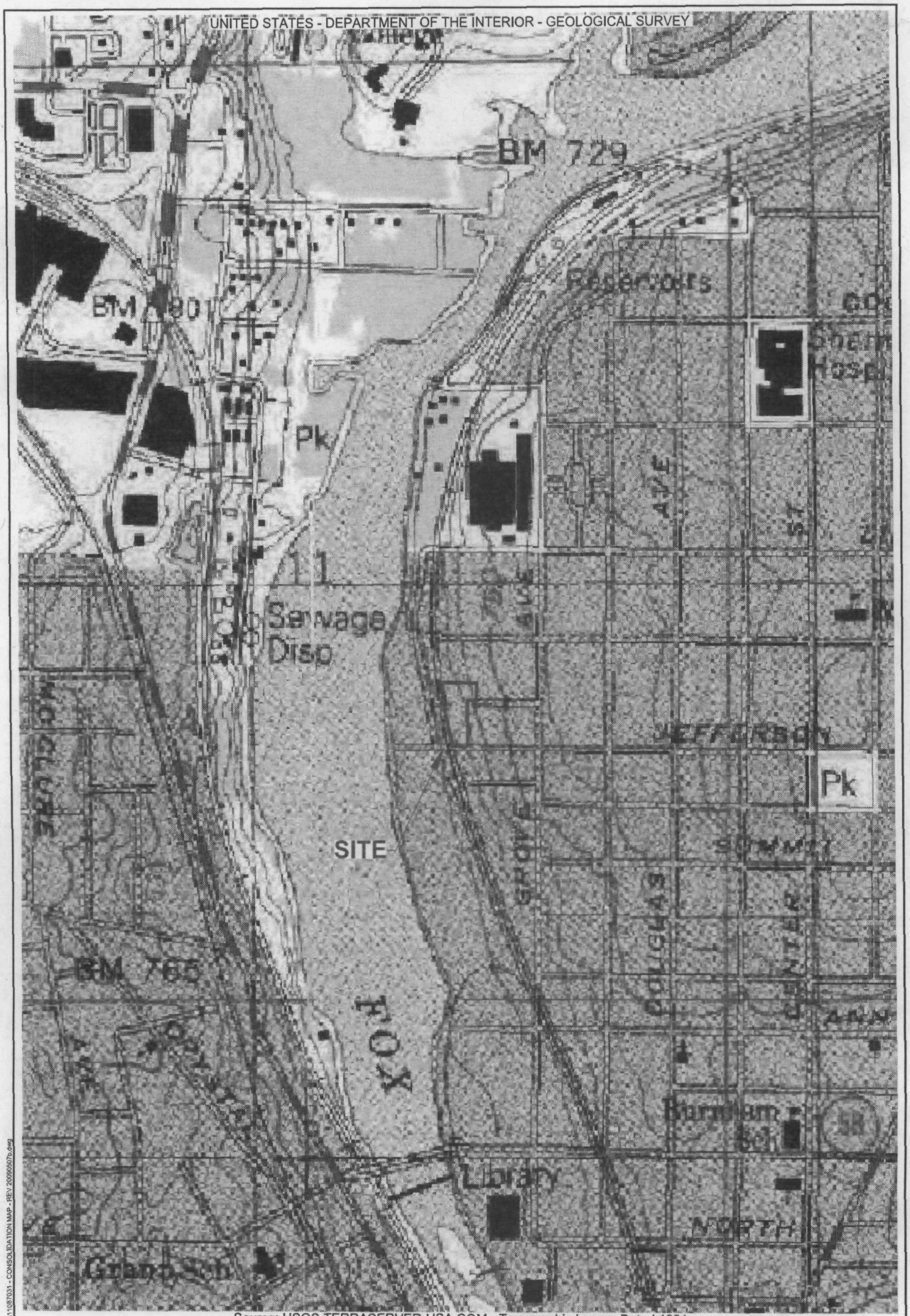
- Preparation of Health and Safety Plans – Submit within seven days after notice to proceed.
- Phase I – The remediation/disposal contractor will initiate and complete Phase I within two weeks following approval to proceed.
- Phase II – The on-site work will be initiated approximately one to three weeks after completion of Phase I. On-site work will require approximately two days.
- Removal Action Completion Report – The Environmental Consultant will compile and prepare the completion report within 60 days of disposal of the materials.

5.0 REPORTING

As the conclusion of the removal action, a report will be prepared and submitted to USEPA. The Removal Action Completion Report will include a narrative of the process used to address the drummed materials and gas cylinders, document the material quantities transported and disposed off-site, and summarize the analytical data obtained during the evaluation process.

The report will also be submitted to IEPA as part of the SRP reporting process.

FIGURES



Source: USGS TERRASERVER-USA.COM - Topographic Image, Dated 1991

----- Approximate Site Location

N

0 500'

APPROXIMATE SCALE

Project Mngr: MRW	Project No. 11077052	Terracon Consulting Engineers and Scientists	TOPOGRAPHIC VICINITY MAP
Drawn By: DAC	Scale: AS-SHOWN	135 AMBASSADOR DRIVE NAPERVILLE, ILLINOIS 60540	ELGIN SALVAGE YARD - JEFFERSON SITE
Checked By: MRW	Revised By: -	PH. (630) 717-4263 FAX. (630) 357-9489	20 JEFFERSON STREET
Approved By: MRW	Date: May 7, 2009		ELGIN, ILLINOIS

FIG. No. 1

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES.

N:\PROJECTS\2008\11087031\DIAGRAMS\11087031 - CONSOLIDATION MAP - REV 20090507b.dwg